

**PMR Private Mobile Radio  
User Manual**

**BT 100**

**BEKO**

## Please read this manual first!

Dear Customer,

We hope that your product which has been manufactured in modern facilities and passed through a strict quality control procedure will give you the best results.

Therefore, we advise you to read through this manual carefully before using your product and keep it for future reference.

## This user manual will...

... help you use your machine in a fast and safe way.

- Please read the User Manual before installing and starting your machine.
- Particularly follow the instructions related to safety.
- Keep this User Manual within easy reach. You may need it in the future.
- Please read all additional documents supplied with this machine.

Please note that this User Manual may be applicable for several other models. Differences between models will be identified in the manual.



This product has been produced in  environmentally friendly, modern facilities

# Contents

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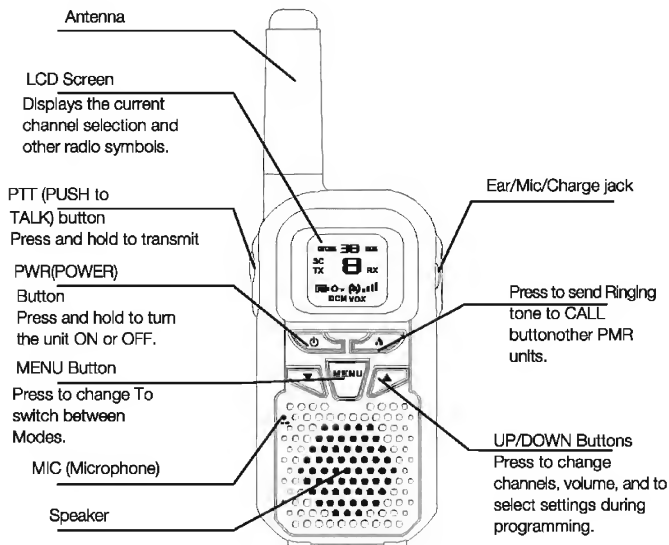
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## Cautions

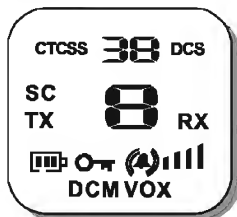
- Do not subject the device to severe impact or drop it from high position.
- Do not use the player in extreme hot or cold, dusty or damp field. Do not expose it to direct sunshine.
- Back up the data frequently in case of accident data loss.
- Avoid using the player in strong magnetic field.
- Keep the device away from water or other liquids. In the event that water or other liquids enter the device, power off the product immediately, take out the battery and clean the device.
- Do not use chemical solution to clean the device in order to avoid corrosion. Clean it with a dry cloth.
- We are not responsible for the damages or lost data caused by malfunction, misusing, repairing the device or battery replacement.
- Do not attempt to disassemble, repair or modify the product, or it will be out of guarantee.
- The design of the player or actual display may be different from what is shown in this manual. It should be subject to the actual display or design.

## 1 Key Features

Private mobile radio with twin charger




## LCD Screen



**8** Channel Number. Changes from 1 to 8 as selected by the user.

**38** CTCSS Code. Changes from 1 to 38 as selected by the user.

 Displays the Battery charge level. When the bars are reduced, the battery needs recharging.

**TX** Displayed when transmitting a signal.

**RX** Displayed when receiving a signal.

**DCM** Displayed when the Dual Watch function is turned On


**DCS** Displayed when the Digital Code System is turned On

**VOX** Displayed when the VOX feature is enabled.

**SC** Displays when the PMR is scanning all channels.

 Displayed when the Key Lock feature is activated.

 Displays the current Speaker volume level.

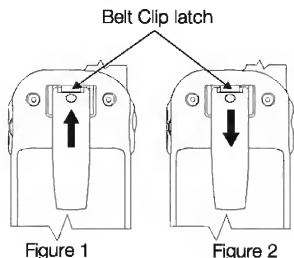
 Displays when the call signal is ON.

 Displays when the vibrator function is activated.

## 2 Installations

### Removing the Belt Clip

- Pull the Belt Clip latch forward (away from the PMR)
- While pulling the Belt Clip latch, push up the Belt Clip as shown in Figure1.



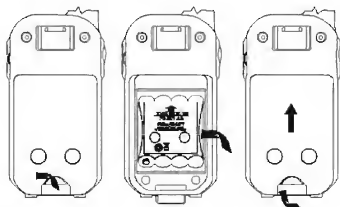
### Installing the Belt Clip

- Slide the Belt Clip into the slot as shown in Figure2. A "click" indicates the Belt Clip is locked into position.

### Installing the Battery pack

Figure 3

Figure 4



**Caution:** Observe the proper battery polarity orientation when installing batteries. Incorrect positioning can damage both the batteries and the unit.

- Slide down the Battery Compartment Cover.
- Install the rechargeable battery pack by following the orientation as shown in Figure 3 (the arrow is showing and pointing upward.)
- Replace the Battery Compartment Cover. See Figure 4.

### Important

Read these Safety Warnings before you charge the batteries. When placing the PMR in the charger, use only the power supplies listed in the user instructions supplied with the PMR. Don't try to recharge non-rechargeable batteries. Make sure the battery compartment cover is securely locked in place when you are charging the batteries. Dispose of used batteries safely and in a way that will not harm the environment- never try to burn them or put them anywhere, they could get burnt or punctured. Don't leave dead batteries in your PMR units. They might leak if you do.

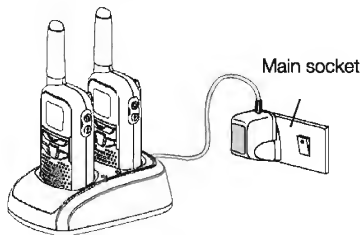
### Charging the battery pack

- Insert the small plug on the end of the mains adaptor into the Power-in Connection Jack at the back of the desktop charger.
- Plug the mains adaptor into a 240V AC, 50Hz main socket with the switch on the socket set to OFF.
- Switch ON the main socket.

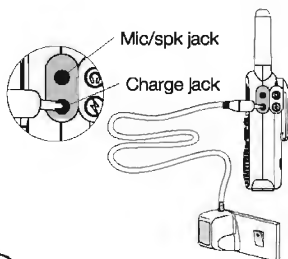
The PMR must be charged using the mains adaptor provided. Using any other adaptor will result in non-compliance with EN60950-1 and will invalidate any approvals & warranty.

- Place the PMR units in the charge cradle in an upright position and facing outward. The Charge LED indicators will light up.
- It takes about 10 hours to fully recharge the batteries if they are completely run down. New batteries take up to 14 hours to fully charge.
- Charging the battery pack (using adaptor) Lift the charge socket cover located on the right side of the handset.

**Important:** Always turn off the PMR units when harging. This will shorten the charging time.



Insert the round connector of the 9.0V DC/200mA adaptor into the charge jack.



Plug the mains adaptor into a 240V AC, 50Hz main socket with the switch on the socket set to OFF. Use only power supplies listed in the user instruction. Csec AC Adaptor brand ; Model -CSD0900200G power supply

Then switch ON the main socket.

**Battery meter** The battery meter is located in the left corner of the LCD Screen. It appears like a battery with three bars inside. These indicate the amount of power available. When the battery level reaches its minimum level in PMR on mode, unit will emit two beep tones and automatically the unit will power off.



The PMR can detect the battery charge in 4 levels;



Battery charge at high level.



Battery charge at medium level.



Battery charge at low level. At



this level, the PMR will emit a "beep" sound for every 10 seconds in normal mode.

**Important:** Charge the unit for 10-14 hours. Battery charge at very low level. When the battery level reaches its minimum level in PMR on mode, unit will emit two beep tones and automatically turn off the power and proceeds to watch mode.

**Important:** Charge the unit for 10-14 hours.

**CAUTION :** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Use only the batteries listed in user instruction - CEL brand;  
EPT43AAA60H Ni-MH  
4.8V/AAA600mAh rechargeable battery pack

**Battery life** The PMR has a built in power saver to make the batteries last longer. But when you are not using the units, turn them OFF to conserve battery power.

### 3 Operation

#### Transmitting range

The talk range depends on the environmental and terrain. It will be reach (up to about 8km) in wide open spaces, without obstructions such as hills or buildings. Don't try to use two PMR units which are less than 1.5m (5feet) apart. If you do, you may experience interference.

#### Important safety warning

To reduce radio frequency exposure

when you are using your PMR, hold the unit at least 5cm (2 inches) away from your face. Never use your PMR outdoors during a thunderstorm. Don't use the PMR in the rain. If your PMR ever gets wet, turn it off and remove the battery. Dry the battery compartment and leave the cover off for a few hours. Don't use the unit until it is completely dry. Keep the PMR out of the reach of babies and young children.

## Turning the Unit ON/OFF To Turn ON;



- a. Press and hold the POWER button until the LCD Screen turns ON and displays the current channel.

## To switch OFF;

- b. Press and hold the POWER button until the LCD screen turns blank. You can hear a musical tone each time to confirm.

## Adjusting the Speaker volume

The volume level is shown by vertical bars the LCD screen. You can change the volume while using your PMR, or while the unit is idle (switched on but not in use). press the UP button to increase, or press the DOWN button to decrease the speaker volume.

## Changing Channels

The PMR has 8 available channels, to communicate with other PMR users within range, you must all have your PMR tuned to the same channel.



- a. Press the MENU button once, the current channel number flashes on the LCD Screen.
- b. Press the UP or DOWN button to select the desired channel. The channel changes

from 1 to 8, or vice versa.

- c. Press the PTT button to confirm the channel setting.

**Note:** Refer to the "Channel Table" section of this Owner's Manual for detailed frequency listing.

## Setting the CTCSS sub-channel

Each channel also has 38 sub-channels to let you set up group of users within the same channel for more private communication. If you have set the sub-channel, you can only communicate with other PMR users turned to the same channel and sub-channel.

## SETTING THE DCS ADVANCED DIGITAL CODE.

Each channel also has 83 digital codes to let you set up group of users for more secured private communication.



- a. Press the menu button 3 times. DCS code flashes out the LCD screen.
- b. Press the up or down button to select the desired DCS code.

- c. Press PTT button to confirm the channel setting.

To turn the sub-channel function off, simply set the sub-channel to 0 (zero). You can communicate with any PMR user set to the same channel who also turns off the sub-channel operation (or whose PMR unit does not have the feature).



- a. Press the MENU button twice, the current CTCSS sub-channel number flashes on the LCD Screen.
- b. Press the UP or DOWN button to select one of the 38 CTCSS sub-channels. c.

Press the PTT button to confirm the sub-channel setting.

## Transmitting and Receiving

The PMR transmission is "one way-at-



-time." While you are speaking, you can not receive a transmission. The PMR is an open-license band. Always identify yourself when transmitting on the same channel.

### Transmitting (sending a speech)



a. Press and hold the PTT (push to talk) button to transmit your voice. "TX" will be displayed on the LCD Screen.

b. Hold the unit in a vertical position with the MIC

(Microphone) 5 cm away from the mouth. While holding the PTT button, speak into the MIC (microphone) in a normal tone of voice.

c. Release the PTT button when you have finished transmitting.

### Monitor

You can use the Monitor feature to check for weak signals on the current channel.



a. Press and hold the MENU and DOWN buttons at the same time. "RX" will be displayed on the LCD Screen.

Your PMR will pick up signals on the current channel, including background noise.

b. Press the PTT button to stop the channel monitoring.

### Setting the VOX (Voice Activated) Sensitivity

In VOX mode, the PMR will transmit a signal only when it is activated by your voice or other sounds around you. The unit will transmit further for 2 seconds even if you stop talking. The level of VOX sensitivity is shown by

a number on the LCD Screen. At the highest level, the units will pick up softer noise (including background noise); at the lowest level, it will pick up only quite loud noise.



a. Press the MENU button 4 times, "VOX" will be displayed and "OF" flashes on the LCD Screen.

b. Press the UP button to set the VOX sensitivity level (the maximum level is "3"). To

deactivate the VOX function, press the DOWN button until "OF" appears on the LCD Screen. c. Press the PTT button to confirm your setting. "VOX" will steadily appear on the LCD Screen as long as the VOX feature is activated.

VOX operation is not recommended if the PMR will be used in a noisy or windy environment.

### Vibrator and Call alert

Your FX-117 can alert you to incoming signal by emitting an audible call tone and vibration signal.

### Call-Ring tone

You can send a Call-ring tone to other PMR users to give an alert that you want



to communicate with them.

Press the CALL button. You will hear a ring tone for about two seconds; "TX" appears on the LCD Screen. Any other units within the transmitting range and turned to the same

channel and sub-channel (if applicable) will hear the Call-ring tone.

### Selecting a Call - Ring tone

The PMR is equipped with 5 different types of Call-Ring tones.



- Press the MENU button 8 times, the LCD Screen will display the CA while is blinking.
- Press the UP or DOWN button to select the desired Call-ring tone. A respective Call- Ring tone sound will be played when changing from one tone to another.
- Press the PTT button to confirm your setting.

### Activating the Vibrator mode



- Press the MENU button 9 times; "I" flashes on the LCD Screen.
- Press the UP OR DOWN button to activate the vibrator function. Or

### Setting the Roger Beep

The Roger Beep is a tone which is automatically transmitted whenever the PTT button is released. This alerts the receiving party to inform that you have intentionally ended the transmission, and you are now in receive mode.



- Press the MENU button 10 times, "ON" flashes on the LCD Screen.
- Press the UP or DOWN button ("ON" will be displayed on the LCD screen) or deactivate ("OFF" will be displayed on the LCD screen) the key Tone feature.
- Press the PTT button to confirm your setting.

### Setting the Key Tone ON or OFF

This feature allows the PMR to emit a confirmation tone after pressing each button.



- Press the MENU button 11 times, "ON" flashes on the LCD Screen.
- Press the UP or DOWN button ("ON" will be displayed on the LCD screen) or deactivate ("OFF" will be displayed on the LCD screen) the key Tone feature.
- Press the PTT button to confirm your setting.

### Setting the Dual Watch Mode

Your PMR is capable of monitoring two channels, the current and another (dual watch) channel. If the unit detects a signal on either channel, it will stop and receive the signal.



- Press the MENU button 12 times, "DCM" will be displayed while "OF " flashes on the LCD Screen.
- Press the UP or DOWN button to select the Dual Watch channel (1-8, except the current channel).
- Press the MENU button to change the CTCSS code.
- Press the UP or DOWN button to select the desired CTCSS code (1-38)
- Press the MENU button to change the DCS code.
- Press the PTT button to confirm your setting.

## Activating the auto Channel Scan

Channel scan perform searches for active signals in an endless loop for all 8 channels, 38 CTCSS codes and all 83 DCS codes.



- Press the MENU button 5 times
- Press the UP or DOWN button to begin scanning channels when an active signal is detected, channelscan pauses on the active channel.
- Press the MENU button again, CTCSS flashes on the LCD screen press the UP or

DOWN button to begin scanning the CTCSS from 1-38.

d. Press the MENU button again, DCS flashes on the LCD screen. Press the UP or DOWN button to begin scanning DCS code 1-83.



e. Press the PTT button to confirm your setting.

## 4 Auxiliary Features

### Key Lock

The Key Lock feature allows user to disable the UP, DOWN and MENU buttons so that the PMR settings could not be changed accidentally.



- To activate the Key Lock feature, press and hold the MENU button until  appears on the LCD Screen.
- To deactivate the key Lock feature, press and hold the MENU button until  disappears on the LCD Screen. The PTT, and POWER

buttons will remain functional even if the Key Lock feature is activated.

### Microphone/Earphone/Charge Jack

The PMR is equipped with an auxiliary microphone, earphone, and charge jack located at the opposite side of the PTT button.

### LCD Screen Back Light

Every time a button is pressed (except PTT and CALLbutton), the LCD Screen back light will illuminate for 4 seconds.

## 5 Specifications

Channels Available	8 Channels
CTCSS Sub-channel	38 for each Channel
Output Power (TX)	0.5 W
Range	Up to 8 Kms.

Channel Frequency Table

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	446.00625	5	446.05625
2	446.01875	6	446.06875
3	446.03125	7	446.08125
4	446.04375	8	446.09375

## 6 Safety

### Damaged Antenna

Do not use any PMR that has a damaged antenna. If a damaged antenna comes in contact with the skin, a minor burn may result.

### Batteries

All batteries can cause property damage and/or bodily injury such as burns if conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

### For Vehicles with an Air Bag

Do not place your PMR in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a PMR is placed in the air bag deployment area and the air bag inflates, the PMR may be propelled with

great force and cause serious injury to the occupants of the vehicle.

### Potentially Explosive Atmospheres

Turn your PMR OFF when in any area with a potentially explosive atmosphere, unless it is a type especially qualified for such use (for example, Factory Mutual Approved). Sparks in such areas could cause an explosion or fire resulting in injury or even death.

### Batteries

Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

### Blasting Caps and Areas

To avoid possible interference with blasting operations, turn your PMR OFF near electrical blasting caps or in a "blasting area" or in areas posted: "Turn off the two way radio." Obey all signs and instructions.

**NOTE:** Areas with potentially explosive atmospheres are often, but not always clearly marked. They include fueling areas such as below deck on boats; fuel or chemical transfer or storage facilities; areas where the air contains chemicals

or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

## **7** Cleaning and Care

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To clean your PMR, use a soft cloth dampened with water. Do not use cleaners or solvent, which may cause damage that may not be covered by guarantee.